



By
HI SIBLEY

These fine goggles were made by a Hawaiian. Experts consider this type more satisfactory for serious diving and continuous use than the ordinary rubber variety

SOUTH-SEA

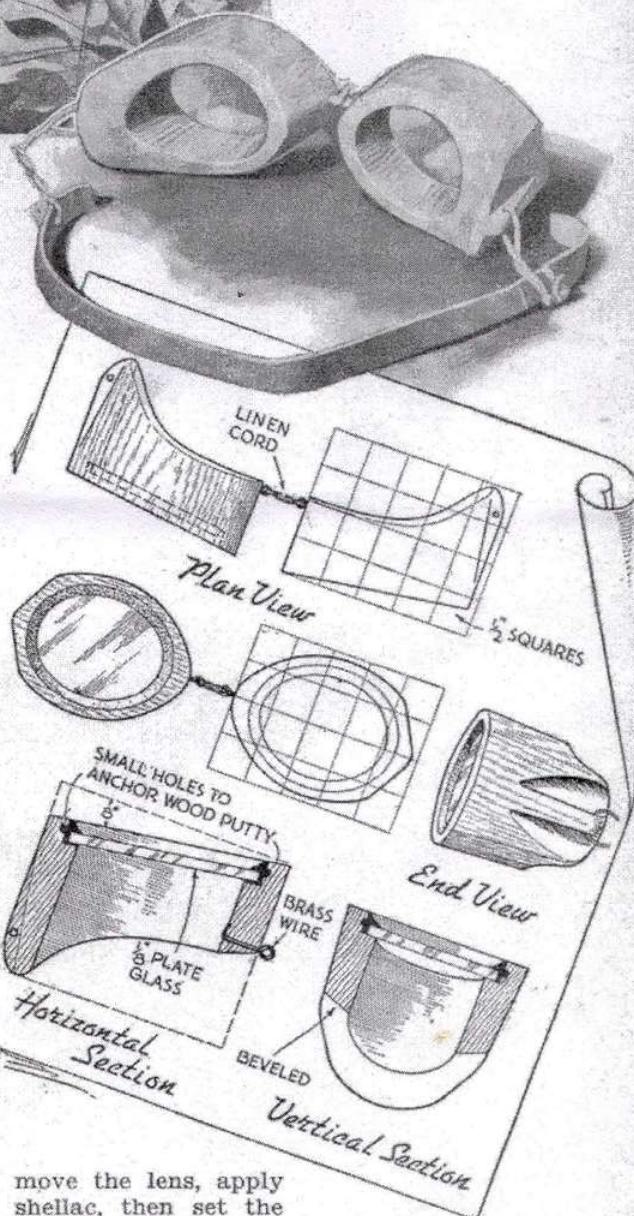
Diving Goggles

WITH a little care and patience, you can construct diving goggles exactly like those used by the spear fishermen of the South Seas and expert Hawaiian divers.

Any nonporous hardwood not likely to split may be used, but it must be thoroughly seasoned. The goggles shown in the photographs were carved from "hau" (pronounced "how"), a wood available in Hawaii.

Cut two blocks 2" by .2" by $2\frac{1}{2}$ ", and bevel the front surface of each on an angle of about 8 deg. Then bore and file out the openings as shown. Carve a rabbet or seat for the lenses, which are plain plate glass about $\frac{1}{8}$ " thick. Any glazier will cut these for you. In making the seat, try to get as perfect a fit as possible. By coating the lens with lampblack and pressing down on the seat, high spots will be revealed. Do not mount the lenses until the outside of the wood is shaped to its final form, and the small brass eyes for the cord have been inserted in their holes and clinched inside.

Apply shellac on the lens seat, then a thin layer of plastic composition wood. Press down with the lens to smooth the paste. Re-



move the lens, apply shellac, then set the lens permanently. Clamp or put weights on the lens to hold it firmly until the shellac dries. Finally, apply composition wood around the edges on top, as shown. If

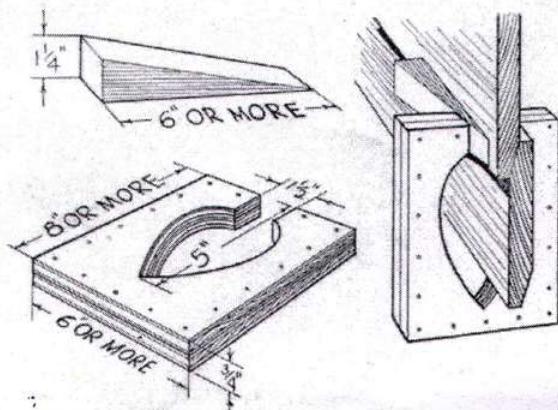
small, shallow holes are first drilled around the inside, they will serve to anchor the plastic material more firmly.

The rim that fits around the eye should be beveled carefully so that the pressure will be equal all around. The flesh will yield enough, if the wood is properly fitted, to form a watertight joint. Give the wood two or three coats of shellac all over.

To prevent fogging in use, soak the goggles in water of the same temperature as that in which they are to be used. Wet the skin around the eyes and press the goggles on to create a partial vacuum inside. This will make the eyes feel a bit queer, but does not hurt. The proper spacing of the two members can be determined by experiment.



A fairly tight rubber band keeps the goggles on



Boat-Planking Clamps

IF YOU do not have enough large screw clamps to hold the planks while fitting and riveting a small lapstreak boat, make up a dozen wedge clamps from two layers of $\frac{3}{8}$ " plywood as shown above. The inner portion of the jaws is sawed larger so the clamps can be used on curves.—J. W. RANKIN.



Radiator Hose Used as Golf Practice Ball

A 2" PIECE of $1\frac{3}{4}$ " radiator hose may be used for practicing golf shots, either indoors or outdoors, with all clubs except the putter. When hit, it gives about the same feel as a golf ball, and it reacts to the way it is hit much as a regular ball does. A perfectly hit shot will make it fly true and straight, whereas a poorly hit one causes it either to hook or slice. If hit underneath, it pops up, and topping will make it skitter over the ground for some distance.—LOUIS R. JAFFEE.



Grinder Set on Tractor to Sharpen Farm Tools

ONE farmer attached a grinding wheel base to his tractor as shown at the left. This required but little more labor than squaring the end of a block of wood to fit one of the regular sockets provided for attaching cultivating equipment. Powered from the belt pulley of the tractor, the grinder is useful for putting mower knives, cultivator shovels, and plowshares in good condition, as well as for other odd jobs.—ROYCE M. ROATH.